UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

46917 7590 0226/2009
KONRAD RAYNES & VICTOR, LLP.
ATIN: IBM37
315 SOUTH BEVERLY DRIVE. SUITE 210

BEVERLY HILLS, CA 90212

EXAMINER

GOODCHILD, WILLIAM J

ART UNIT PAPER NUMBER

2445

DATE MAILED: 02/26/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,559	09/15/2003	David Darden Chambliss	SJO920030006US1	3819

TITLE OF INVENTION: METHOD FOR MANAGING INPUT/OUTPUT (I/O) PERFORMANCE BETWEEN HOST SYSTEMS AND STORAGE VOLUMES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/26/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir ed below or directed off tions	or tran ng the l nerwise	smitting the ISSU Patent, advance of in Block 1, by (a	TE FEE and PUBLICAT: ders and notification of r i) specifying a new corre	ON FEE (if requiraintenance fees vipondence address;	ired). I vill be and/or	Blocks 1 through 5 st mailed to the current (b) indicating a sepa	hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Not Fee paps bay	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
46917	7590 62/26	/2009			Cer	tificate	of Mailing or Trans	mission
KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210				I he Stat add tran	eby certify that th	is Feet	() Transmittal is being	deposited with the United it class mail in an envelope above, or being facsimile ate indicated below.
BEVERLY HILI	LS, CA 90212							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO. CONFIRMATION NO.		
10/663,559	09/15/2003			David Darden Chambliss		SJ	D920030006US1	3819
TITLE OF INVENTION VOLUMES	N: METHOD FOR M.	ANAGI	NG INPUT/OUT	PUT (I/O) PERFORMA	NCE BETWEEN	HOST	SYSTEMS AND S	TORAGE
APPLN. TYPE	SMALL ENTITY	ISS	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	05/26/2009
EXAM	INER		ART UNIT	CLASS-SUBCLASS				
GOODCHILD	, WILLIAM J		2445	709-224000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ess an assignee is ident h in 37 CFR 3.II. Comp	" Indica ied. Use A TO B	tion form of a Customer E PRINTED ON	(1) the names of up to or agents OR, alternati (2) the name of a single registered attorney or a 2 registered patent attor isted, no name will be PHE PATENT (print or type data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY	vely, e firm (having as a gent) and the nam meys or agents. If printed. e) stent. If an assign assignment.	memb es of u no nam	er a 2p to p to e is 3	ocument has been filed for
Please check the appropri		catego						oup entity Government
Advance Order - #	o small entity discount p		ed)	Department of Fee(s): (Please A check is enclosed. Payment by credit care The Director is hereby overpayment, to Department.	d. Form PTO-2038 authorized to char	is atta	ched. required fee(s), any de	
	s SMALL ENTITY state	ıs. See :	37 CFR 1.27.	b. Applicant is no lon				
interest as shown by the r	d Publication Fee (it requeecords of the United Sta	uired) v ites Pate	vill not be accepted ent and Trademark	office.	he applicant; a regi	stered a	attorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name				Registration N				
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.3 U.S.C. USPTO rden, sh O NOT	11. The informatic 122 and 37 CFR O. Time will vary tould be sent to the SEND FEES OR	on is required to obtain or a 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS To	etain a benefit by t imated to take 12 i idual case. Any co r, U.S. Patent and D'THIS ADDRESS	he publ minutes omment Traden S. SENI	tic which is to file (and to complete, including s on the amount of tire ark Office, U.S. Deptor of the transfer of the transf	I by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 02/26/2009

APPLICATION NO.	FILING DATE	Е	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/663,559	09/15/2003		David Darden Chambliss	SJO920030006US1	3819	
46917	7590 02/2	26/2009		EXAM	UNER	
KONRAD RAYNES & VICTOR, LLP.				GOODCHILD, WILLIAM J		
ATTN: IBM37				ART UNIT	PAPER NUMBER	
315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			2445			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 843 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 843 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Notice of Allowability WILLIAM J. GOODCHILD 2445

0/663,559	CHAMBLISS ET AL	
xaminer	Art Unit	

Applicant(s)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

Application No.

of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 11/29/2008. The allowed claim(s) is/are 1-15,17 and 18. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements

noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s) 1. Notice of References Cited (PTO-892)

- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit
 - of Biological Material

5. Notice of Informal Patent Application

Interview Summary (PTO-413), Paper No./Mail Date

7.

Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

/Patrice Winder/

Primary Examiner, Art Unit 2445

9. ☐ Other

Application/Control Number: 10/663,559 Page 2

Art Unit: 2445

DETAILED ACTION

Response to Arguments

 Applicant's arguments, see Applicant Arguments/Remarks Made in an Amendment, filed 11/29/2008, with respect to claims 1-15 and 17-18 have been fully considered and are persuasive. The rejection of claims 1-15 and 17-18 has been withdrawn.

Allowable Subject Matter

- Claims 1-15 and 17-18 are allowed. The claims indicated include limitations that
 the prior arts of record do not appear to teach or render obvious, hence they are
 allowed.
- 3. The following is an examiner's statement of reasons for allowance: The combination of an SLA controller monitoring I/O and providing flow control based on SLA metrics defined within the SLA appear to be non-obvious. Applicants arguments "Thus, even if one modifies the QoS enforcer or content controller of Guha with the virtualization controller of Ng, the claim requirements with respect to a virtualization controller and SLA server are still not taught or suggested by the cited combination of Guha and Ng. The Examiner found that the combination of Guha and Ng do not disclose the claim requirement of a service level agreement server determining performance data maintained for the application service connection for which the

Application/Control Number: 10/663,559

Art Unit: 2445

gathered performance data was received; updating, by the service level agreement server, the determined performance data with the performance data received from the virtualization controller. The Examiner cited col. 2, line 60 to col. 3, line 8 of Bradley as teaching this claim requirement, (OA4, pg. 4) Applicants traverse. The cited cols. 2-3 of Bradley mentions a time based service monitoring mechanism for monitoring service level agreements to monitor a level of network service offered by a service provider. Data is received for defining one or more tests for monitoring the level of network service provided to a customer. The tests are distributed to agents configured to communicate with devices. Although the cited Bradley discusses how service level agreements are monitored, there is no teaching in Bradley or the cited Guha-Ng, that a service level agreement server updates performance data with performance data received from a virtualization controller, and then use that performance data to determine whether performance criteria is satisfied to determine whether to send commands to the virtualization controller that provided the performance data to have the virtualization controller throttle I/O transmission for a connection for which performance criteria is not satisfied", relating to the combination of Bradlev with Guha-Ng are persuasive.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/663,559

Art Unit: 2445

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrice Winder/ Primary Examiner, Art Unit 2445

WJG 02/11/2009